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19316B MLRS MISSILE NUMBER V61-43 V61-44 V61-45 V61-46
V61-68 ROUND NUMBE..(U) ARMY ELECTRONICS RESEARCH AND
DEVELOPMENT COMMAND WSMR NM ATM.. D C KELLER 29 JUN 84
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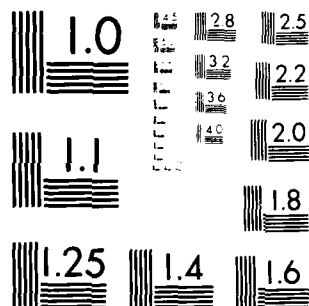
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DR-1348

June 1984

AD

METEOROLOGICAL DATA REPORT

193168 MLRS

MISSILE NUMBER V61-43, V61-44, V61-45, V61-46, V61-68

ROUND NUMBER V603/AT2-65 THRU V607/AT-2-69

29 June 1984

by

DONALD C. KELLER

Program Support Coordinator

Phone Number (505) 679-9568

AVN Number 349-9568

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 19316B MLRS, Missile Number V61-43, V61-44, V61-45, V61-46, V61-68, Round Number V603/AT2-65 THRU V607/AT-2-69 are presented in tabular form.		

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INTRODUCTION

19316B MLRS, Missile Numbers V61-43, V61-44, V61-45, V61-46, and V61-68 Round Numbers V603/AT2-65 Thru V607/AT2-69, were launched from Brillo, White Sands Missile Range (WSMR). New Mexico, at 0707:01, 0707:06. 0707:11, 0739:05, and 0739:10 MDT, 29 June 1984. The scheduled launch times were 0700 MDT and 0730 MDT with a 4.5 second separation.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction speed, and cloud cover were made at the Brillo Met Site at T-0 minutes.

(2) Anemometer data were provided from existing tower-mounted anemometers at Brillo. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low Level wind data were obtained from pilot-balloon observations at:

SITE AND ALTITUDE

D 3 1/2	2 km
Deadhorse	2 km

SITE AND TIME

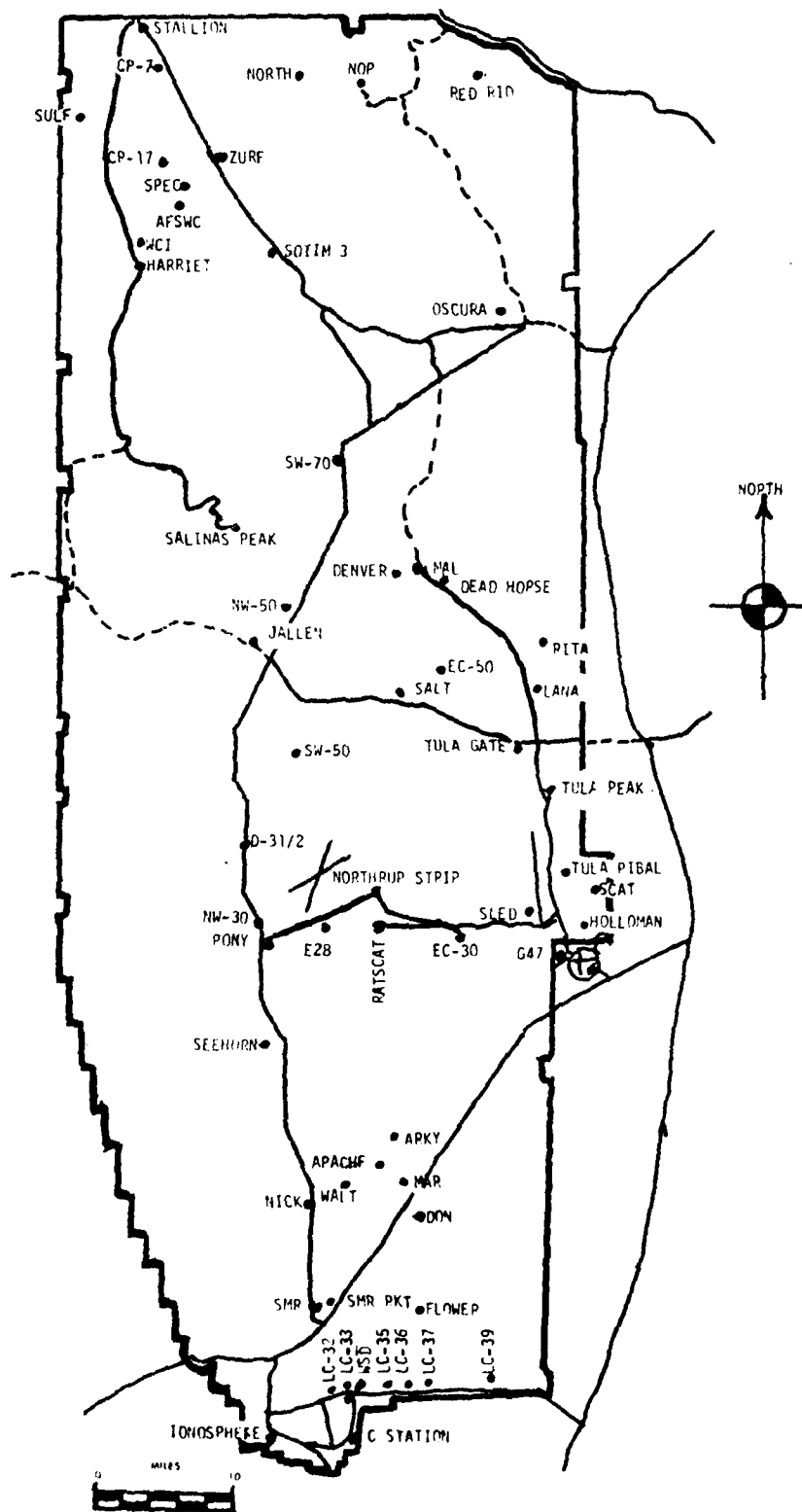
SITE AND TIME

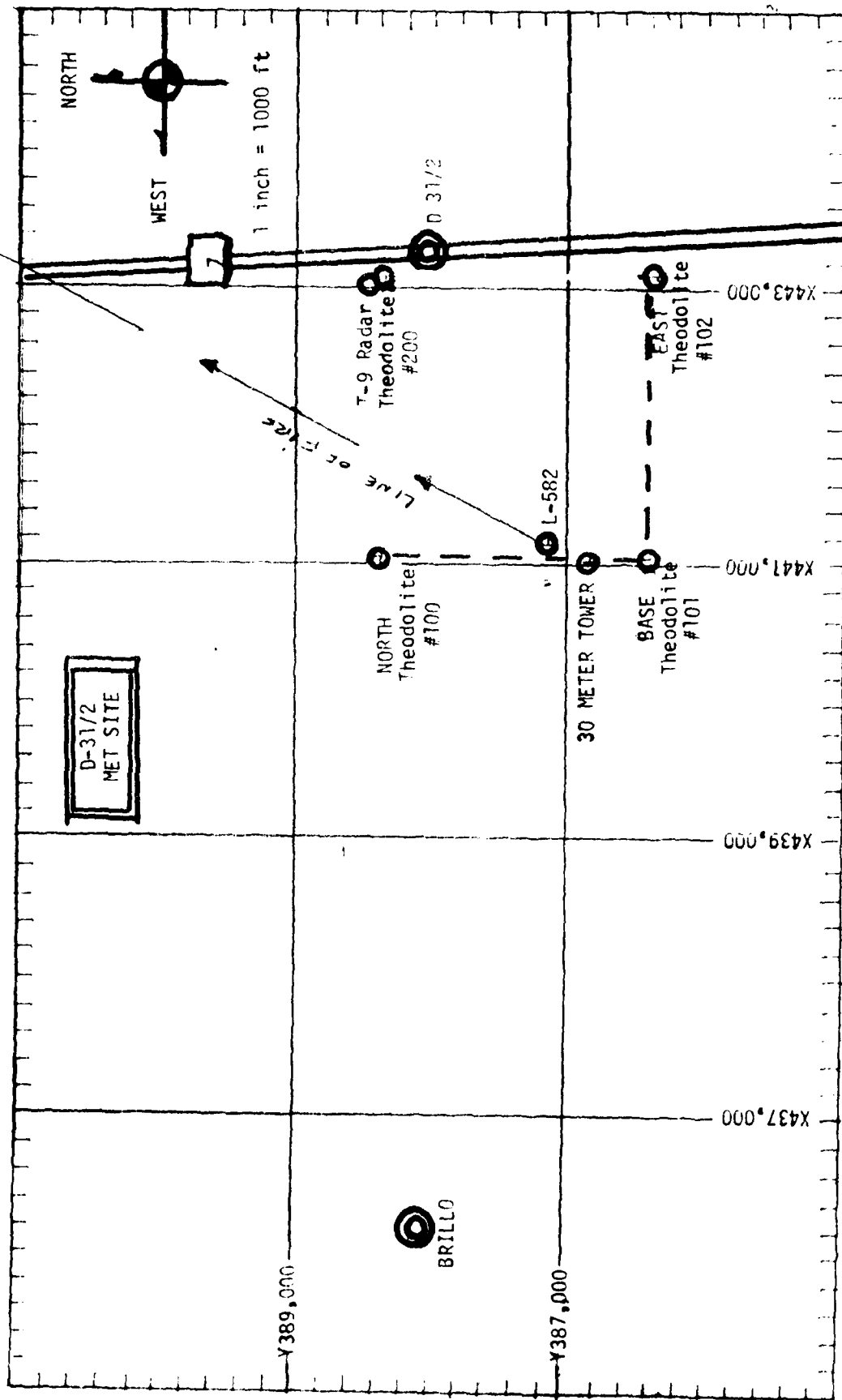
NW-30	0510	MDT
Jallen	0500	MDT
NW-30	0707	MDT
Jallen	0740	MDT

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By	
Distribution/	
Availability Codes	
Availability For	
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WSMR METEOROLOGICAL SITES





PROJECT SURVEY INFORMATION

TABLE 1										
STATION BRILLO										
DATE		29	Jun	1984	N= 441,018.71 Y= 386,849.19 H= 4004.80					
TIME	LDI	PRESSURE mb	TEMPERATURE °C	DEW POINT °C	RELATIVE HUMIDITY %	DENSITY gm/m ³	DIRECTION degs	WIND SPEED kts	CHARACTER kts	VISIBIL- ITY
0630		881.7	20.5		62		330	5		40
0707		881.7	22.4		59		340	6		40
0739		881.6	23.8		56		360	7		40

OBSTRUCTIONS TO VISIBILITY	CLOUDS							REMARKS		
	1st LAYER			2nd LAYER		3rd LAYER				
	AMT	TYPE	HGT	AMT	TYPE	HGT	AMT		TYPE	HGT
	8	CI	22,000							
	7	CI	22,000							
	7	CI	22,000							

PSYCHROMETRIC COMPUTATION

TIME:	0630	0707	0739
DRY BULB TEMP.	20.5	22.4	23.8
WET BULB TEMP.	15.6	16.8	17.5
WET BULB DEPR.	4.9	5.6	6.3
DEW POINT	13.0	14.0	14.4
RELATIVE HUMID.	62	59	56

TABLE 2

ANEMOMETER DATA - 30 Ft Level of 30 Meter Tower

X= 441,018.71 Y= 386,849.19 H= 4004.80 (BASE)

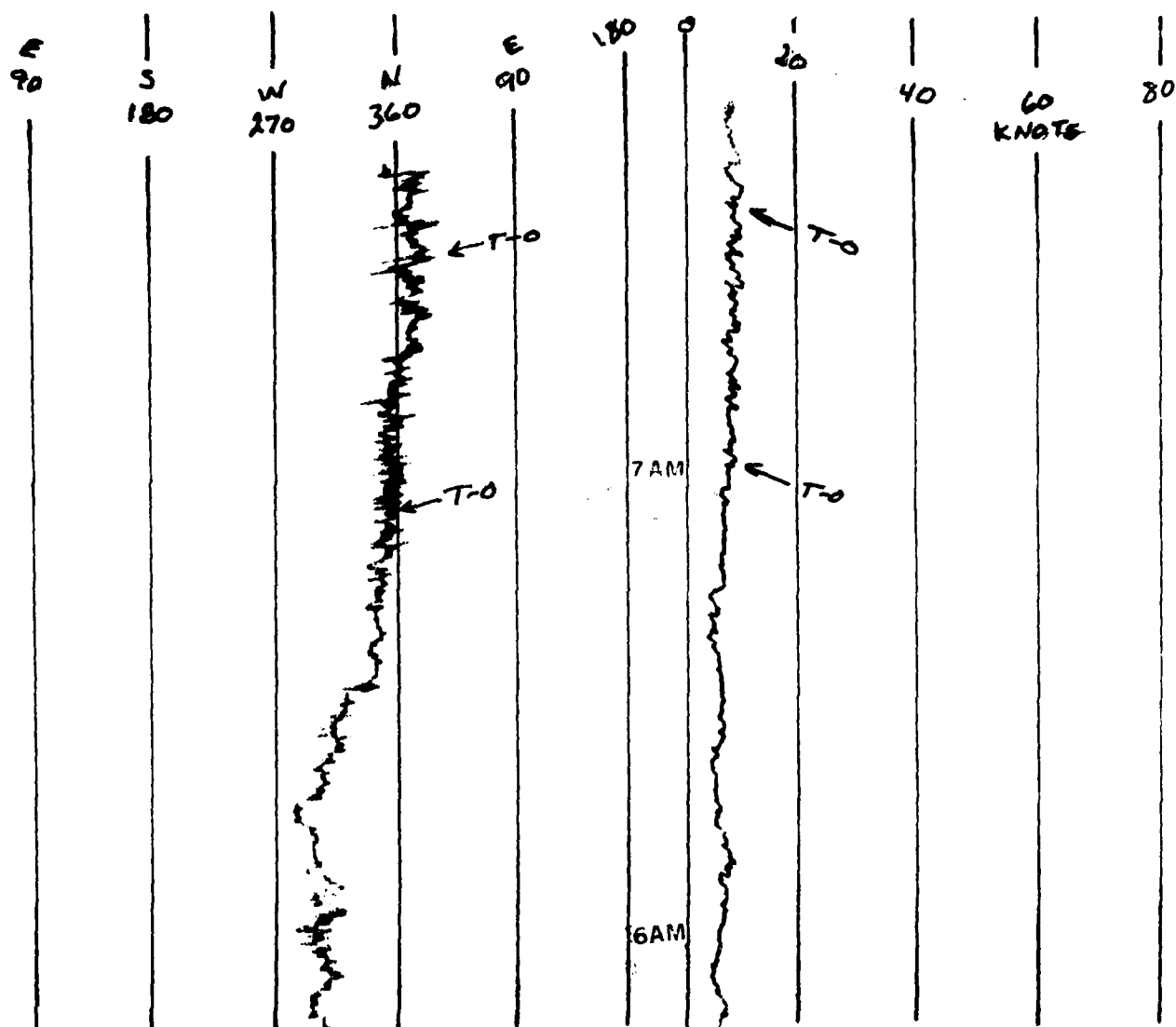


TABLE 3

ANEMOMETER DATA - 60 Ft Level of 30 Meter Tower

X= 441,018.71 Y= 386,849.19 H= 4004.80(BASE)

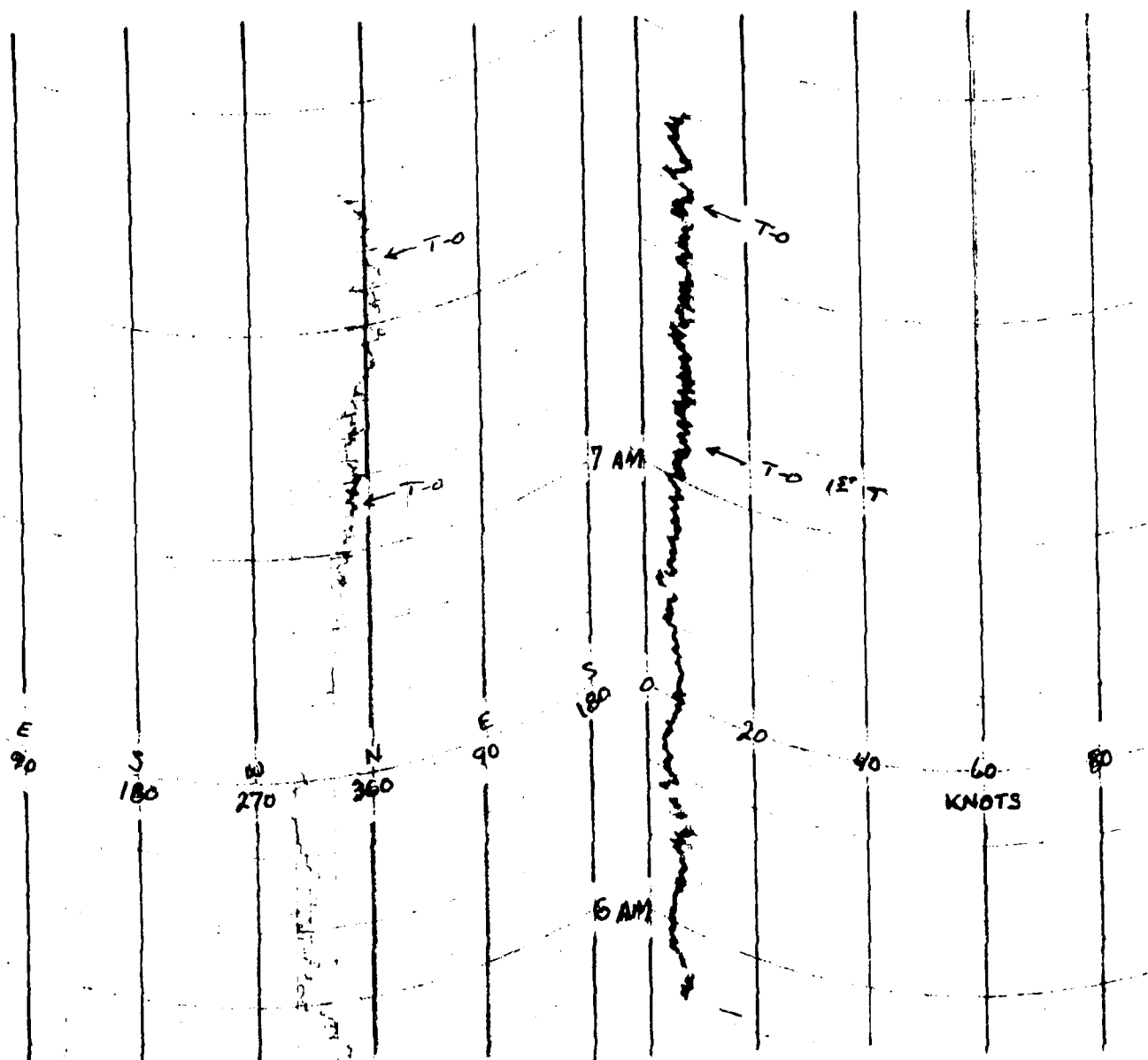


TABLE 4

ANEMOMETER DATA - 90 Ft Level of 30 Meter Tower

X= 441,018.71 Y= 386,849.19 H= 4004.80 (BASE)

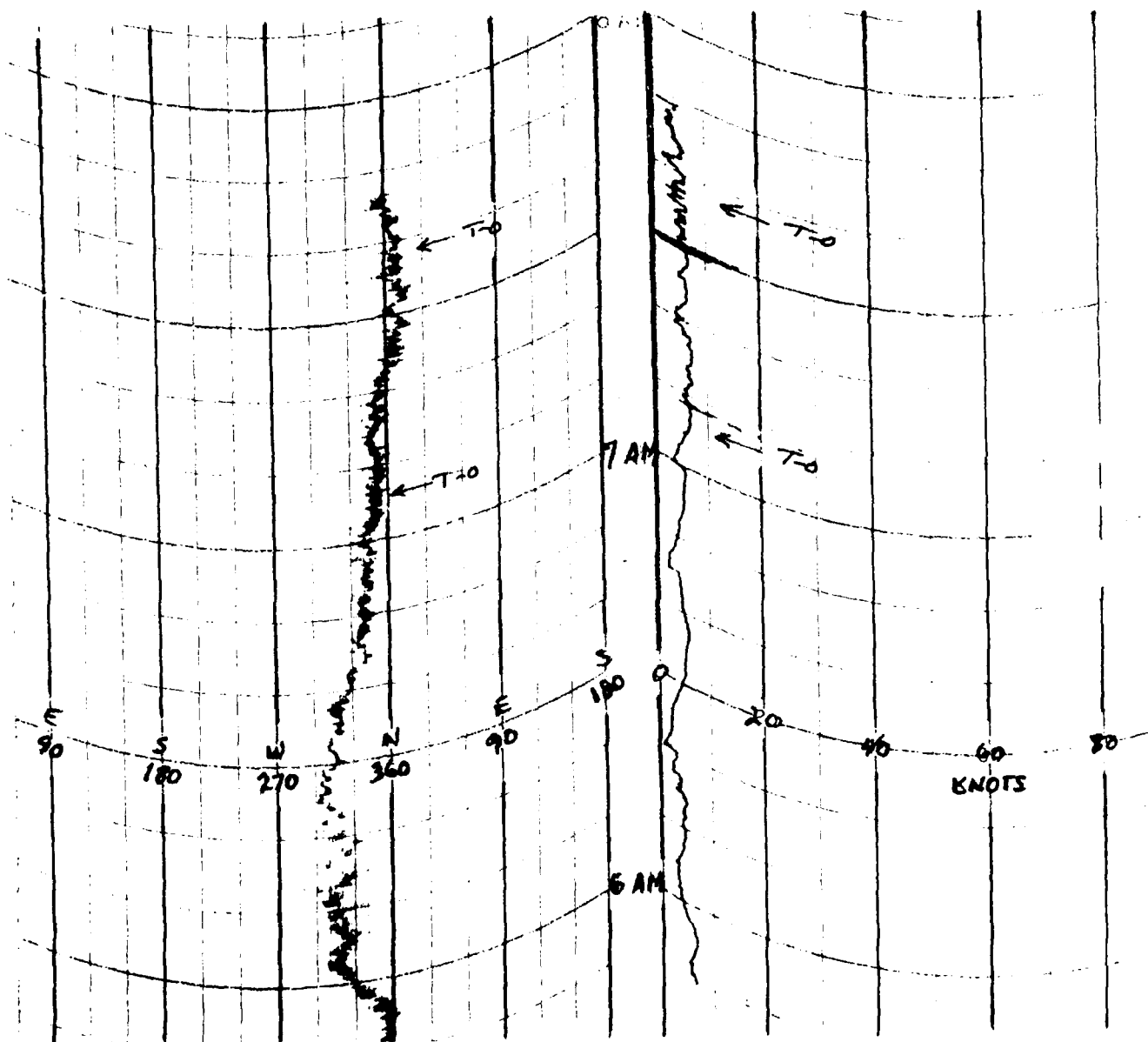


TABLE 5

TIME PILOT-BALLOON MEASURED WIND DATA

DATE 29 June 1984

FILE: D-3 1/2

TIME: 0707 MDT

WSIM COORDINATES:

X= 441,053.12

Y= 386,316.94

H= 4,008.31

SITE: DEADHORSE

TIME 0700 MDT

WSIM COORDINATES:

X= 519,982.11

Y= 490,249.23

H= 4,133.12

LAYER MIDPOINT	DIRECTION	SPEED
METERS AGL	DEGREES	KNOTS
SURFACE	330	04
150	348	09
210	349	09
270	351	09
330	348	09
390	346	08
500	340	05
650	334	02
800	010	05
950	024	08
1150	046	10
1350	050	09
1550	061	09
1750	079	09
2000	086	10

LAYER MIDPOINT	DIRECTION	SPEED
METERS AGL	DEGREES	KNOTS
SURFACE		CALM
150	352	05
210	355	05
270	014	02
330	089	01
390	304	02
500	292	07
650	225	03
800	158	03
950	335	06
1150	358	05
1350	348	07
1550	015	08
1750	053	06
2000	096	08

All Data obtained from Double Theodolite Tracked pilot-balloon observations

TABLE 6

T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 29 June 1984

SITE: D-3 1/2

TIME: 0740 MDT

WSTM COORDINATES:

X= 441,053.12

Y= 386,316.94

H= 4,008.31

SITE: DEADHORSE

TIME 0730 MDT

WSTM COORDINATES:

X= 519,982.11

Y= 490,249.23

H= 4,133.12

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	330	05
150	006	09
210	008	10
270	009	10
330	007	10
390	005	09
500	360	08
650	353	04
800	009	03
950	039	05
1150	036	11
1350	044	11
1550	056	10
1750	057	11
2000	MISG	MISG

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	180	03
150	008	05
210	012	06
270	024	06
330	036	06
390	037	05
500	038	04
650	005	02
800	322	06
950	345	10
1150	009	11
1350	017	13
1550	027	14
1750	044	15
2000	067	14

All Data obtained from Double Theodolite Tracked pilot-balloon observations

TABLE 7

AIMING AND T-TIME COMPUTER MET MESSAGE DATA
29 June 1984

NW-30 0510MDT

METCM1329065

291120122881

00000000	29530881
01031003	29760871
02315002	29710847
03298005	29400808
04046005	29010763
05063011	28670719
06137011	28320677
07168020	27950637
08185023	27510599
09156025	27110563
10128024	26860529
11107017	26630496
12189012	26240450
13225005	25530395
14618010	24800345
15557019	24030300
16579028	23220260
17560032	22380224
18540033	21530192

JALLEN 0500 MDT

MATCM1332065

291100124879

00000000	29400879
01630003	29660869
02269005	29650845
03331007	29440806
04124002	29100761
05146006	28720717
06139013	28370676
07175021	28000636
08162024	27590598
09129027	27190562
10130033	26820528
11111021	26650495
12168011	26250449
13217009	25520394
14638007	24800344
15555019	24060299
16568029	23320259
17561034	22460224
18541038	21641092
19560042	20870163

NW-30 0707 MDT

METCM1329065

291310122882

00640003	29630882
01612009	29610872
02001006	29600847
03054003	29410809
04085011	29140763
05165011	28840719
06156019	28440678
07170022	28020638
08177021	27570600
09172021	27170564
10161021	26990530
11141013	26700497
12201010	26270451
13251004	25590396
14610009	24890346
15561002	24150301
16574029	23340261
17550032	22520225
18544034	21720193

JALLEN 0740 MDT

METCM1332065

291370124880

00071004	29600880
01031007	29630870
02039005	29580845
03016005	29380807
04052010	29120761
05121010	28680717
06170017	28320676
07175020	27800636
08176021	27540598
09177022	27080562
10160021	26870527
11146018	26580495
12183010	26020449
13242005	25380393
14580009	24620343
15553022	23880298
16580028	23110258
17555033	22180222
18556039	21430190

STATION ALTITUDE 4313.63 FEET MSL
29 JUNE 84 0510 MDT
ASCENSION NO. 13

SIGNIFICANT LEVEL DATA
1PT020013
NW 3N

GEODETIC COORDINATES
32.38497 LAT DEG
106.49714 LON DEG

TABLE 8

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	
331.4	4013.4	20.1	13.5	55.0
378.2	4114.0	21.7	14.8	55.0
467.0	4491.5	23.0	15.1	51.0
350.0	5042.9	22.1	14.2	51.0
763.7	7353.5	15.2	11.3	70.0
734.6	9162.2	13.1	7.1	57.0
700.0	10435.2	11.1	2.7	55.0
577.7	11370.7	8.9	-7.7	51.0
561.9	12012.2	8.5	-9.9	26.0
532.0	13255.4	5.4	-13.0	25.0
590.2	15050.3	.4	-10.4	44.0
573.2	15850.3	-1.4	-7.1	55.0
561.3	16375.5	-2.9	-11.4	52.0
546.5	17123.0	-4.4	-17.9	34.0
549.1	17931.5	-6.5	-24.5	19.0
500.0	19390.5	-6.6	-21.5	29.0
490.2	19895.1	-7.5	-29.0	16.0
427.0	23342.2	-12.8	-21.5	19.0
400.0	25021.4	-17.0	-25.1	19.0
188.1	27051.5	-22.5	-22.7	39.0
151.1	27515.5	-22.5	-39.7	19.0
109.5	31159.3	-11.3	-45.1	24.0
100.7	31971.3	-12.8	-42.5	37.0
269.5	34248.0	-13.3	-49.2	32.0
250.0	35073.4	-13.2		
200.0	40856.3	-55.5		
175.6	43407.0	-52.1		
153.5	45605.3	-66.8		
100.0	46705.3	-57.5		

STATION ALTITUDE 4010.40 FEET MSL
24 JUNE 50 0510 MDT
ASCENSION NO. 12

UPPER AIR DATA
151020Z
NO. 30

GEODETIC COORDINATES
32.5497 LAT DEG
105.69715 LONG DEG

TABLE 9

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND METERS PER SECOND	WIND DATA DIRECTION DEGREES (T)	SPEED KNOTS	INDEX OF REFRACTION
4010.4	581.4	20.1	56.0	1040.1	559.4	170.4	1.1	1.000350
4500.0	565.7	23.0	51.0	1011.2	572.9	170.4	1.1	1.000350
5000.0	551.3	22.0	51.0	997.1	571.9	170.4	2.3	1.000323
5500.0	537.0	21.1	54.8	987.5	570.6	170.4	3.6	1.000295
6000.0	522.9	19.7	54.7	978.1	569.2	170.4	4.2	1.000267
6500.0	509.0	18.5	54.7	969.2	567.9	152.6	4.0	1.000239
7000.0	495.5	17.0	54.0	964.4	565.5	152.6	3.0	1.000213
7500.0	482.5	15.5	54.3	959.5	563.1	31.2	1.4	1.000187
8000.0	469.7	14.0	54.1	954.8	560.8	30.2	3.9	1.000160
8500.0	457.1	12.4	54.1	950.3	558.4	22.5	7.2	1.000133
9000.0	444.7	10.9	54.1	945.9	556.1	24.9	5.4	1.000107
9500.0	432.5	9.4	54.1	941.7	553.8	33.5	10.7	1.000080
10000.0	420.4	7.9	54.1	937.6	551.5	42.3	13.4	1.000053
10500.0	408.4	6.4	54.1	933.6	549.2	51.5	16.2	1.000026
11000.0	396.5	4.9	54.1	929.7	546.9	60.7	19.0	1.000000
11500.0	384.7	3.4	54.1	925.9	544.6	70.0	21.8	1.000015
12000.0	373.0	1.9	54.1	922.2	542.3	79.3	24.6	1.000015
12500.0	361.3	0.4	54.1	918.6	540.0	88.6	27.4	1.000015
13000.0	349.7	-1.1	54.1	915.1	537.7	97.9	30.2	1.000015
13500.0	338.1	-2.6	54.1	911.7	535.4	107.2	33.0	1.000015
14000.0	326.6	-4.1	54.1	908.4	533.1	116.5	35.8	1.000015
14500.0	315.1	-5.6	54.1	905.2	530.8	125.8	38.6	1.000015
15000.0	303.7	-7.1	54.1	902.1	528.5	135.1	41.4	1.000015
15500.0	292.3	-8.6	54.1	899.1	526.2	144.4	44.2	1.000015
16000.0	281.0	-10.1	54.1	896.2	523.9	153.7	47.0	1.000015
16500.0	269.7	-11.6	54.1	893.4	521.6	163.0	49.8	1.000015
17000.0	258.4	-13.1	54.1	890.7	519.3	172.3	52.6	1.000015
17500.0	247.1	-14.6	54.1	888.1	517.0	181.6	55.4	1.000015
18000.0	235.8	-16.1	54.1	885.6	514.7	190.9	58.2	1.000015
18500.0	224.5	-17.6	54.1	883.2	512.4	200.2	61.0	1.000015
19000.0	213.2	-19.1	54.1	880.9	510.1	209.5	63.8	1.000015
19500.0	201.9	-20.6	54.1	878.7	507.8	218.8	66.6	1.000015
20000.0	190.6	-22.1	54.1	876.6	505.5	228.1	69.4	1.000015
20500.0	179.3	-23.6	54.1	874.6	503.2	237.4	72.2	1.000015
21000.0	168.0	-25.1	54.1	872.7	500.9	246.7	75.0	1.000015
21500.0	156.7	-26.6	54.1	870.9	498.6	256.0	77.8	1.000015
22000.0	145.4	-28.1	54.1	869.2	496.3	265.3	80.6	1.000015
22500.0	134.1	-29.6	54.1	867.6	494.0	274.6	83.4	1.000015
23000.0	122.8	-31.1	54.1	866.1	491.7	283.9	86.2	1.000015
23500.0	111.5	-32.6	54.1	864.7	489.4	293.2	89.0	1.000015
24000.0	100.2	-34.1	54.1	863.4	487.1	302.5	91.8	1.000015
24500.0	88.9	-35.6	54.1	862.2	484.8	311.8	94.6	1.000015
25000.0	77.6	-37.1	54.1	861.1	482.5	321.1	97.4	1.000015
25500.0	66.3	-38.6	54.1	860.2	480.2	330.4	100.2	1.000015
26000.0	55.0	-40.1	54.1	859.4	477.9	339.7	103.0	1.000015
26500.0	43.7	-41.6	54.1	858.7	475.6	349.0	105.8	1.000015
27000.0	32.4	-43.1	54.1	858.1	473.3	358.3	108.6	1.000015
27500.0	21.1	-44.6	54.1	857.6	471.0	367.6	111.4	1.000015
28000.0	9.8	-46.1	54.1	857.2	468.7	376.9	114.2	1.000015
28500.0	-2.5	-47.6	54.1	856.9	466.4	386.2	117.0	1.000015
29000.0	-13.8	-49.1	54.1	856.7	464.1	395.5	119.8	1.000015
29500.0	-25.1	-50.6	54.1	856.6	461.8	404.8	122.6	1.000015
30000.0	-36.4	-52.1	54.1	856.6	459.5	414.1	125.4	1.000015

STATION ALTITUDE 4710.47 FEET MSL
24 JUNE 84
ASCENSION NO. 11
0510 MDT

UPPER AIR DATA
191027017
NW 30

GEODETIC COORDINATES
32.83497 LAT DEG
136.69714 LON DEG

TABLE 9 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE WILHELM'S DEGREES	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION DEGREES (T)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	415.5	-14.6	19.0	551.0	525.7	129.5	11.4	1.000127
24500.0	408.5	-15.7	19.0	552.5	525.2	125.6	9.2	1.000125
25000.0	403.3	-16.9	19.0	554.2	523.7	131.0	5.2	1.000123
25500.0	398.2	-18.3	23.7	556.0	522.0	133.7	3.7	1.000121
26000.0	394.3	-19.7	28.5	558.0	520.2	97.1	2.5	1.000120
26500.0	375.5	-21.1	73.5	520.3	513.5	57.3	1.9	1.000115
27000.0	365.9	-22.5	72.7	512.6	517.0	12.2	2.5	1.000115
27500.0	361.3	-22.5	19.7	507.1	515.9	350.5	4.5	1.000113
28000.0	353.8	-23.7	19.7	497.9	513.4	748.0	7.1	1.000111
28500.0	346.4	-24.9	20.3	486.0	513.9	749.0	10.1	1.000109
29000.0	339.2	-25.1	21.0	474.2	512.4	749.2	12.6	1.000107
29500.0	332.1	-27.2	21.7	470.5	510.9	746.7	14.5	1.000105
30000.0	325.2	-28.5	22.4	463.0	509.4	741.1	15.6	1.000104
30500.0	318.5	-29.7	23.1	455.5	507.9	729.2	15.8	1.000102
31000.0	311.8	-30.9	23.8	448.3	506.4	717.9	15.6	1.000101
31500.0	305.2	-32.0	26.9	440.8	505.1	711.1	18.5	1.000099
32000.0	298.7	-33.0	36.5	437.8	503.7	709.0	20.3	1.000097
32500.0	292.3	-34.3	35.2	426.1	502.2	710.2	21.9	1.000095
33000.0	285.9	-35.5	34.3	418.1	500.5	716.6	23.1	1.000094
33500.0	279.5	-36.7	33.7	412.2	500.1	720.0	24.4	1.000092
34000.0	273.7	-37.9	32.7	405.6	507.5	724.4	25.2	1.000091
34500.0	267.5	-39.2	29.1**	398.7	505.9	728.1	28.2	1.000089
35000.0	261.9	-40.5	19.7**	392.1	504.2	727.5	28.6	1.000083
35500.0	255.1	-41.5	10.2**	385.5	502.5	726.4	28.8	1.000085
36000.0	250.4	-43.1	7.0*	378.2	500.9	723.5	28.9	1.000084
36500.0	244.7	-44.4		372.7	500.2	720.2	29.4	1.000083
37000.0	239.1	-45.7		364.2	507.5	718.9	30.7	1.000082
37500.0	233.5	-47.0		359.3	505.9	713.0	31.4	1.000080
38000.0	228.3	-48.2		351.5	504.2	717.4	31.8	1.000079
38500.0	223.1	-49.5		347.5	502.5	716.0	31.7	1.000077
39000.0	217.0	-50.8		341.5	500.9	714.1	31.7	1.000075
39500.0	211.0	-52.1		335.5	500.2	711.4	32.1	1.000075
40000.0	205.1	-53.4		329.9	507.5	708.9	32.5	1.000073
40500.0	200.3	-54.7		324.2	505.9	706.7	33.6	1.000072
41000.0	195.0	-55.0		318.5	504.2	705.0	33.0	1.000071
41500.0	189.9	-57.1		312.3	502.5	703.4	32.6	1.000070
42000.0	184.2	-58.5		307.2	500.9	702.7	32.1	1.000068
42500.0	178.7	-59.5		301.5	500.1	702.1	31.9	1.000067
43000.0	173.3	-61.1		296.2	507.5	703.4	33.1	1.000066
43500.0	167.0	-62.3		290.3	505.7	707.1	34.4	1.000065

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.40 FEET MSL
 24 JUNE 64 0510 MDT
 ASCENSION NO. 13

UPPER AIR DATA
 1010200017
 W. 70

GEODETIC COORDINATES
 32.95497 LAT DEG
 135.49714 LON DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE WILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY G/M ³	SPEED OF SOUND M/SEC	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
4400.0	171.7	-63.4		255.1	554.3	313.4	35.1	1.000063
4300.0	167.5	-64.4		270.5	552.3	319.5	37.2	1.000042
4200.0	163.4	-65.5		274.1	541.4	325.7	37.9	1.000041
4100.0	159.4	-66.6		258.7	539.9			1.000040
4000.0	155.4	-67.0		252.7	539.3			1.000039
4000.0	151.5	-67.4		254.5	538.9			1.000037

STATION ALTITUDE 4313.40 FEET "SI"
 26 JUNE 87
 ASCENSION NO. 13

MANDATORY LEVELS
 1010220017
 44 30

GEODETIC COORDINATES
 32.93627 LAT DEG
 106.49714 LON DEG

TABLE 10

PRESSURE GEOPOTENTIAL MILLIBARS	FEET	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT PERCENT	REL. HUM. PERCENT	WIND DATA	
					DIRECTION DEGREES(TN)	SPEED KNOTS
55.0	5745.	22.1	14.2	51.	123.6	2.4
50.0	5755.	19.1	12.1	53.	159.8	3.9
45.0	5771.	16.3	8.5	58.	21.0	7.7
40.0	10475.	11.1	2.7	55.	57.8	10.4
35.0	12491.	7.3	-11.1	25.	23.4	17.2
30.0	14520.	1.5	-10.7	40.	137.4	22.3
25.0	16906.	-3.9	-15.5	40.	81.6	25.2
20.0	19164.	-6.5	-21.6	29.	57.8	18.7
15.0	22741.	-10.3	-30.5	18.	103.5	13.0
10.0	24987.	-17.0	-35.1	19.	139.0	5.1
5.0	28215.	-24.3	-40.7	20.	143.5	5.5
0.0	31822.	-32.3	-42.5	17.	103.7	12.9
25.0	35907.	-43.2			127.4	23.9
20.0	40739.	-55.5			105.4	33.1
175.0	43504.	-62.5			338.4	16.7
15.0	46587.	-67.5				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.0 FEET MSL
0500 MDT
7

SIGNIFICANT LEVEL DATA
151000Z070
JALLEN

GEODEIC COORDINATES
33.16712 LAT DEG
105.69511 LON DEG

TABLE 11

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MCL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
473.2	4051.0	19.9	13.5	71.0
373.7	4252.1	21.5	15.2	63.0
308.7	4393.2	21.0	15.2	46.0
250.0	4594.3	20.8	14.7	53.0
241.5	5297.5	21.3	15.4	52.0
227.0	5796.5	20.7	14.4	67.0
210.3	6255.9	19.5	14.2	71.0
192.9	7051.7	17.8	12.7	72.0
140.7	8499.7	14.9	7.9	53.0
121.3	9276.8	13.0	5.5	55.0
100.0	10453.1	10.2	3.7	51.0
573.7	13577.9	10.1	-13.1	26.0
653.0	11911.3	9.3	-3.7	27.0
567.3	13445.0	5.4	-10.3	31.0
572.3	15173.5	2.2	-6.4	34.0
572.1	15345.1	2.2	-10.0	35.0
500.1	17273.7	-5.5	-17.5	32.0
504.9	19171.5	-7.0	-22.2	15.0
500.0	19381.3	-5.5	-23.9	15.0
472.5	20223.5	-8.9	-30.1	15.0
469.9	22120.0	-10.3	-32.5	14.0
400.0	25014.7	-17.0	-27.4	15.0
377.1	27111.3	-22.5	-41.3	16.0
345.2	29521.9	-24.6	-43.1	15.0
300.0	31299.7	-32.5	-49.3	16.0
275.5	33851.1	-35.7	-52.2	15.0
263.5	34551.5	-39.0	-53.8	19.0
20.7	35650.4	-42.0		
22.4	33425.4	-48.4		
100.0	40885.3	-54.5		
170.0	44253.2	-52.8		
156.5	45973.9	-55.3		
150.0	46754.5	-57.5		

GEODETIC COORDINATES
32.15712 LAT DEG
106.42511 LON DEG

UPPER AIR DATA
121000Z070
JALLEN

STATION ALTITUDE 4251.0 FEET "SL"
29 JUNE 82 0500 MDT
ASCENSION NO. 72

TABLE 12

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	RELATV. PERCENT	DENSITY GM/CM ³ AFTER	SPEED OF SOUND KNOTS	WIND DATA	INDEX OF REFRACTION
						DIRECTION DEGREES(TW)	
4251.0	879.2	15.7	71.0	1241.7	552.0	0	1.000301
4500.0	865.5	17.7	56.3	1014.3	571.5	178.1	1.000301
5000.0	850.4	20.0	48.0	1000.8	570.5	178.1	1.000295
5500.0	835.6	21.1	42.2	981.8	570.3	178.1	1.000295
6000.0	821.1	20.3	38.4	967.4	552.2	131.1	1.000297
6500.0	806.8	19.4	34.2	954.1	559.7	188.1	1.000295
7000.0	792.6	18.0	31.2	941.8	557.1	177.8	1.000275
7500.0	778.9	17.1	28.4	928.3	555.9	132.9	1.000243
8000.0	764.9	15.3	27.4	914.8	554.9	78.7	1.000241
8500.0	751.3	15.5	25.0	901.4	552.8	76.5	1.000243
9000.0	738.0	14.0	23.2	888.5	552.7	34.5	1.000245
9500.0	724.9	12.4	24.5	874.8	551.1	37.1	1.000241
10000.0	711.9	12.1	22.2	861.8	552.5	31.1	1.000271
10500.0	699.1	10.7	20.3	848.3	557.9	78.2	1.000277
11000.0	686.4	10.5	21.3	840.5	557.1	78.2	1.000212
11500.0	674.0	10.1	24.0	827.5	555.2	79.5	1.000193
12000.0	661.7	9.1	27.3	815.8	555.1	55.1	1.000197
12500.0	649.6	7.6	28.1	804.1	553.6	92.2	1.000194
13000.0	637.7	5.5	29.5	793.1	552.1	27.8	1.000181
13500.0	626.0	5.3	31.4	780.7	550.5	100.7	1.000193
14000.0	614.4	4.0	35.5	769.3	549.2	100.1	1.000185
14500.0	603.0	2.7	47.4	759.2	547.7	97.1	1.000197
15000.0	591.8	1.4	55.1	749.2	545.2	55.1	1.000185
15500.0	580.7	0	62.5	739.2	544.2	77.4	1.000180
16000.0	569.7	-2.1	63.5	728.5	543.1	73.2	1.000175
16500.0	558.9	-4.0	64.4	717.2	541.9	72.4	1.000171
17000.0	548.2	-5.7	67.4	707.0	540.3	73.6	1.000147
17500.0	537.9	-7.4	74.2	696.9	538.3	74.7	1.000143
18000.0	527.6	-9.0	80.3	686.5	537.5	59.3	1.000159
18500.0	517.4	-10.7	83.5	676.2	535.7	54.5	1.000155
19000.0	507.5	-12.4	84.5	665.4	535.2	51.4	1.000151
19500.0	497.7	-14.0	83.1	655.5	533.9	53.5	1.000163
20000.0	488.1	-15.3	85.4	646.0	533.0	67.1	1.000145
20500.0	478.0	-17.4	85.4	636.5	534.2	71.5	1.000143
21000.0	468.3	-19.1	83.7	627.0	533.2	70.0	1.000160
21500.0	458.9	-20.3	80.3	618.1	532.5	59.2	1.000115
22000.0	449.2	-21.4	74.1	609.5	531.9	98.2	1.000135
22500.0	439.5	-22.6	64.1	600.7	530.7	104.4	1.000173
23000.0	429.8	-24.0	54.3	592.9	529.3	107.2	1.000141
23500.0	420.3	-25.3	44.5	585.0	527.9	110.4	1.000147

STATION ALTITUDE 4051.0 FEET NSI
25 JUNE 54 0500 MDT
ACQUISITION NO. 73

UPPER AIR DATA
101007070
JALLER

SYNOPTIC COORDINATES
33.15712 LAT DEG
106.69511 LON DEG

TABLE 12 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TWD)	SPEED KNOTS	INDEX OF REFRACTION
24500.0	416.0	-16.0	14.6	561.2	525.5	116.5	10.5	1.000127
24500.0	408.3	-15.0	14.8	558.5	525.0	116.4	10.4	1.000125
25000.0	400.4	-17.0	15.0	546.1	523.5	119.1	10.4	1.000123
25500.0	392.1	-18.0	15.2	535.9	522.0	123.2	9.7	1.000121
26000.0	384.2	-19.0	15.5	527.7	520.4	127.4	8.2	1.000119
26500.0	376.4	-20.0	15.7	519.7	518.8	134.1	5.3	1.000117
27000.0	368.5	-22.2	15.9	511.9	517.2	128.7	4.5	1.000115
27500.0	361.0	-23.1	16.0	507.1	516.1	106.5	2.8	1.000113
28000.0	353.0	-23.8	16.0	496.8	515.2	34.5	3.8	1.000111
28500.0	345.0	-24.0	16.0	485.5	514.3	10.1	5.9	1.000109
29000.0	339.3	-25.7	16.0	477.5	512.8	157.3	10.1	1.000107
29500.0	333.1	-26.7	16.0	469.8	511.4	146.4	12.8	1.000105
30000.0	325.4	-28.1	16.0	461.2	509.9	135.2	15.3	1.000104
30500.0	318.3	-29.3	16.0	454.7	508.4	127.0	15.5	1.000102
31000.0	311.7	-30.5	16.0	447.6	505.9	118.4	17.3	1.000100
31500.0	305.1	-31.7	16.0	440.1	505.4	110.5	17.9	1.000098
32000.0	298.7	-32.0	16.1	432.2	504.0	103.0	18.4	1.000097
32500.0	292.3	-33.7	16.0	425.5	502.7	106.5	20.0	1.000095
33000.0	285.0	-34.9	17.1	418.2	501.3	110.2	21.5	1.000093
33500.0	277.8	-36.0	17.5	411.0	500.0	114.7	22.3	1.000090
34000.0	273.0	-37.0	18.1	403.2	503.5	116.2	24.0	1.000090
34500.0	267.3	-38.4	18.5	397.1	507.2	116.8	25.1	1.000089
35000.0	262.0	-39.3	16.5**	390.8	505.7	119.5	29.4	1.000087
35500.0	255.2	-40.6	16.5**	387.8	504.1	122.0	32.9	1.000085
36000.0	250.5	-41.7	16.5**	377.4	502.5	121.5	33.2	1.000084
36500.0	244.9	-43.2	17.1	371.1	500.7	120.2	33.3	1.000083
37000.0	239.4	-44.0	16.6	364.2	509.0	116.7	32.8	1.000081
37500.0	234.1	-45.7	16.7	359.8	507.3	115.2	32.2	1.000080
38000.0	228.3	-47.3	16.7	352.3	505.5	116.9	33.6	1.000079
38500.0	223.0	-48.5	16.8	344.2	503.2	119.2	34.4	1.000077
39000.0	218.0	-49.0	16.8	340.3	502.2	115.4	35.2	1.000075
39500.0	213.4	-51.1	17.1	334.8	500.5	114.1	35.1	1.000073
40000.0	208.2	-52.4	17.2	328.0	503.9	110.2	37.1	1.000073
40500.0	202.7	-53.5	17.2	323.2	507.2	108.5	33.1	1.000072
41000.0	198.9	-54.7	17.5	317.5	505.5	105.2	37.2	1.000071
41500.0	194.1	-56.1	17.1	311.4	504.0	105.2	37.7	1.000069
42000.0	189.2	-57.1	16.7	305.7	502.2	102.2	37.9	1.000065
42500.0	184.5	-58.0	16.8	300.7	500.7	101.2	33.8	1.000067
43000.0	180.0	-59.7	16.0	294.8	503.1	103.1	40.8	1.000065
43500.0	176.3	-61.0	17.0	288.4	507.5	104.7	42.1	1.000063

** AT LAST OF COLUMN, RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4050.0 FEET MSL
24 JUNE 84 0500 MDT
ASCENSION NO. 76

UTTER AIR DATA
101700073
JALUP

TABLE 12 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GRAMS/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	UP-POINT CENTIGRADE				DIRECTION DEGREES (T)	SPEED KNOTS	
4400.0	172.1	-62.4			284.2	555.9	736.2	45.7	1.000045
4450.0	167.9	-63.3			278.8	546.3	717.1	42.7	1.000042
4500.0	163.6	-64.4			273.3	532.9	714.7	42.2	1.000041
4550.0	159.8	-65.4			268.7	521.5	710.5	41.6	1.000040
4600.0	155.9	-65.9			262.7	517.1			1.000039
4650.0	152.0	-67.1			257.0	509.2			1.000037

STATION ALTITUDE 4251.00 FEET MSL
 0500 MDI
 ASCENSION NO. 75

MANDATORY LEVELS
 1210000000
 JALFN

GEODETIC COORDINATES
 33.16712 LAT DEG
 136.42511 LON DEG

TABLE 13

PRESSURE MILLIMBS	GEOPOTENTIAL FEET	AIR DEGREES	TEMPERATURE CELSIUS	REL. HUM. PERCENT	WIND DATA	
					DIRECTION DEGREES (TN)	SPEED KNOTS
950.0	5011.	20.2	14.7	58.	179.1	3.5
900.0	4724.	18.5	13.4	72.	185.1	5.5
850.0	4546.	15.5	8.5	55.	77.4	2.5
800.0	4259.	10.0	8.7	51.	73.6	9.1
750.0	4247.	7.2	-2.3	28.	97.0	13.3
700.0	4417.	2.7	-7.1	42.	91.0	25.5
650.0	4520.	-1.1	-15.4	74.	77.1	25.7
600.0	4835.	-5.6	-22.9	15.	52.8	22.5
550.0	5202.	-10.0	-37.8	14.	99.8	11.5
500.0	5497.	-17.0	-37.4	15.	110.1	10.4
450.0	5821.	-24.2	-42.7	16.	40.1	5.4
400.0	6122.	-32.5	-49.0	15.	124.7	12.2
350.0	6377.	-42.0			321.5	72.2
300.0	6794.	-54.5			337.7	78.0
250.0	7352.	-61.8			305.3	42.4
200.0	8074.	-67.5				
150.0	8640.					

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

SIGNIFICANT LEVEL DATA
191223714
NW 30

GEODETIC COORDINATES
32.38697 LAT DEG
106.69716 LONG DEG

TABLE 14

PRESSURE	GEOMETRIC	TEMPERATURE	REL. HUM.
MILIBARS	ALTITUDE	AIR DEWPOINT	PERCENT
MM. FEET		DEGREES	
881.7	4010.4	21.2	52.0
872.3	4215.7	20.5	55.0
863.9	4420.4	20.0	70.0
850.0	4533.5	21.0	57.0
791.6	7072.1	13.2	55.0
731.3	9233.1	15.6	33.0
719.9	9753.9	15.1	-10.5
700.0	10276.2	13.0	16.0
646.0	12723.7	7.3	32.0
536.7	13021.5	5.2	44.0
415.7	17221.9	3.9	49.0
397.8	17277.3	1.6	51.0
391.5	15337.7	.7	51.0
368.9	15174.1	.5	52.0
350.1	15571.0	-0.7	55.0
331.0	17320.0	-3.2	39.0
322.9	18229.7	-3.6	15.0
307.0	19475.5	-3.2	21.0
277.5	22222.4	-5.1	15.0
216.9	42539.2	-12.9	17.0
200.0	25046.2	-13.5	25.0
197.6	25333.2	-13.0	29.0
175.2	26537.6	-20.5	29.0
161.2	27553.1	-23.6	33.0
154.3	28034.2	-23.9	19.0
127.3	29932.1	-25.3	15.0
700.0	31979.5	-22.0	25.0
364.5	36533.5	-18.2	30.0
350.0	37171.9	-22.7	
300.0	40575.3	-24.1	
177.5	43920.7	-21.2	
153.9	45333.5	-25.2	
150.0	46766.9	-25.9	

STATION ALTITUDE 4010.0 FEET MSL
29 JUNE 84
ASCENSION NO. 14

GEOMETRIC ALTITUDE
4010.0 FEET MSL
0707 MDT

STATION ALTITUDE 4010.0 FEET MSL
29 JUNE 84
ASCENSION NO. 14

STATION ALTITUDE 4010.0 FEET MSL
29 JUNE 84
ASCENSION NO. 14

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE F/°C	REL. HUM. PERCENT	WIND DIRECTION DEGREES (T)	WIND SPEED KNOTS	INDEX OF REFRACTION
4010.0	991.7	21.2	100.0	150.0	2.0	1.000269
4510.0	966.7	20.6	97.0	150.0	2.0	1.000300
5010.0	941.6	20.0	94.0	150.0	3.0	1.000297
5510.0	916.5	19.4	91.0	150.0	4.0	1.000294
6010.0	891.4	18.8	88.0	150.0	5.0	1.000291
6510.0	866.3	18.2	85.0	150.0	6.0	1.000288
7010.0	841.2	17.6	82.0	150.0	7.0	1.000285
7510.0	816.1	17.0	79.0	150.0	8.0	1.000282
8010.0	791.0	16.4	76.0	150.0	9.0	1.000279
8510.0	765.9	15.8	73.0	150.0	10.0	1.000276
9010.0	740.8	15.2	70.0	150.0	11.0	1.000273
9510.0	715.7	14.6	67.0	150.0	12.0	1.000270
10010.0	690.6	14.0	64.0	150.0	13.0	1.000267
10510.0	665.5	13.4	61.0	150.0	14.0	1.000264
11010.0	640.4	12.8	58.0	150.0	15.0	1.000261
11510.0	615.3	12.2	55.0	150.0	16.0	1.000258
12010.0	590.2	11.6	52.0	150.0	17.0	1.000255
12510.0	565.1	11.0	49.0	150.0	18.0	1.000252
13010.0	540.0	10.4	46.0	150.0	19.0	1.000249
13510.0	514.9	9.8	43.0	150.0	20.0	1.000246
14010.0	489.8	9.2	40.0	150.0	21.0	1.000243
14510.0	464.7	8.6	37.0	150.0	22.0	1.000240
15010.0	439.6	8.0	34.0	150.0	23.0	1.000237
15510.0	414.5	7.4	31.0	150.0	24.0	1.000234
16010.0	389.4	6.8	28.0	150.0	25.0	1.000231
16510.0	364.3	6.2	25.0	150.0	26.0	1.000228
17010.0	339.2	5.6	22.0	150.0	27.0	1.000225
17510.0	314.1	5.0	19.0	150.0	28.0	1.000222
18010.0	289.0	4.4	16.0	150.0	29.0	1.000219
18510.0	263.9	3.8	13.0	150.0	30.0	1.000216
19010.0	238.8	3.2	10.0	150.0	31.0	1.000213
19510.0	213.7	2.6	7.0	150.0	32.0	1.000210
20010.0	188.6	2.0	4.0	150.0	33.0	1.000207
20510.0	163.5	1.4	1.0	150.0	34.0	1.000204
21010.0	138.4	0.8	0.0	150.0	35.0	1.000201
21510.0	113.3	0.2	0.0	150.0	36.0	1.000198
22010.0	88.2	-0.4	0.0	150.0	37.0	1.000195
22510.0	63.1	-1.0	0.0	150.0	38.0	1.000192
23010.0	38.0	-1.6	0.0	150.0	39.0	1.000189
23510.0	12.9	-2.2	0.0	150.0	40.0	1.000186

UPPER AIR DATA
151200Z
NW 30

STATION ALTITUDE 4010.40 FEET MSL
27 JUNE 64 0707 MDT
ASCENSION NO. 14

SECTETIC COORDINATES
32.85697 LAT DEG
105.47715 LONG DEG

TABLE 15 Cont'd

GEOMETRIC ALTITUDE FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (T)	WIND SPEED KNOTS	INDEX OF REFRACTION
2400.0	417.7	-13.5	86.9	550.7	527.3	128.6	7.7	1.00017
2450.0	409.4	-15.0	86.5	552.8	526.0	132.4	6.5	1.00015
2500.0	401.3	-16.0	84.5	544.5	524.0	129.2	5.6	1.00014
2550.0	393.2	-18.0	82.2	542.5	523.4	129.8	4.4	1.00012
2600.0	385.3	-19.5	83.0	545.5	520.8	134.6	3.2	1.00010
2650.0	377.5	-20.2	85.7	519.7	519.7	129.7	1.3	1.00013
2700.0	369.8	-21.5	86.1	511.2	515.1	130.2	0	1.00015
2750.0	362.2	-23.0	86.9	504.8	515.7	130.7	3.7	1.00017
2800.0	354.8	-24.9	87.1	497.9	515.3	134.6	5.1	1.00017
2850.0	347.5	-23.7	87.1	498.5	515.2	132.1	3.0	1.00017
2900.0	340.7	-24.0	87.7	497.5	515.2	132.3	12.1	1.00017
2950.0	333.1	-25.5	87.7	497.5	515.2	132.3	14.4	1.00017
3000.0	325.4	-27.0	87.7	497.5	515.2	132.3	17.2	1.00017
3050.0	317.9	-28.2	87.7	497.5	515.2	132.3	19.4	1.00017
3100.0	310.3	-29.5	87.7	497.5	515.2	132.3	20.7	1.00017
3150.0	302.7	-30.7	87.7	497.5	515.2	132.3	22.3	1.00017
3200.0	295.2	-32.0	87.7	497.5	515.2	132.3	24.1	1.00017
3250.0	287.7	-33.2	87.7	497.5	515.2	132.3	25.4	1.00017
3300.0	280.2	-34.5	87.7	497.5	515.2	132.3	27.3	1.00017
3350.0	272.7	-35.8	87.7	497.5	515.2	132.3	28.4	1.00017
3400.0	265.2	-37.0	87.7	497.5	515.2	132.3	29.4	1.00017
3450.0	257.7	-38.3	87.7	497.5	515.2	132.3	30.9	1.00017
3500.0	250.2	-39.5	87.7	497.5	515.2	132.3	31.9	1.00017
3550.0	242.7	-40.8	87.7	497.5	515.2	132.3	32.5	1.00017
3600.0	235.2	-42.0	87.7	497.5	515.2	132.3	32.5	1.00017
3650.0	227.7	-43.2	87.7	497.5	515.2	132.3	32.5	1.00017
3700.0	220.2	-44.4	87.7	497.5	515.2	132.3	32.5	1.00017
3750.0	212.7	-45.6	87.7	497.5	515.2	132.3	32.5	1.00017
3800.0	205.2	-46.9	87.7	497.5	515.2	132.3	32.5	1.00017
3850.0	197.7	-48.1	87.7	497.5	515.2	132.3	32.5	1.00017
3900.0	190.2	-49.3	87.7	497.5	515.2	132.3	32.5	1.00017
3950.0	182.7	-50.5	87.7	497.5	515.2	132.3	32.5	1.00017
4000.0	175.2	-51.7	87.7	497.5	515.2	132.3	32.5	1.00017
4050.0	167.7	-52.9	87.7	497.5	515.2	132.3	32.5	1.00017
4100.0	160.2	-54.1	87.7	497.5	515.2	132.3	32.5	1.00017
4150.0	152.7	-55.4	87.7	497.5	515.2	132.3	32.5	1.00017
4200.0	145.2	-56.6	87.7	497.5	515.2	132.3	32.5	1.00017
4250.0	137.7	-57.8	87.7	497.5	515.2	132.3	32.5	1.00017
4300.0	130.2	-59.0	87.7	497.5	515.2	132.3	32.5	1.00017
4350.0	122.7	-60.2	87.7	497.5	515.2	132.3	32.5	1.00017

** AT SECT IN ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4112.43 FEET MSL
29 JUNE 54 0707 MDT
ASCENSION NO. 14

UPPER AIR DATA
1010200014
VM 30

SEODOTIC COORDINATES
32.86597 LAT DES
106.49714 LON DES

TABLE 15 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (T)	SPEED KNOTS	
4400.0	172.9	-61.4		254.4	557.0	714.2	35.9	1.000043
4450.0	168.7	-62.3		278.7	555.7	719.8	35.1	1.000042
4500.0	164.6	-63.3		277.2	554.5	726.3	35.2	1.000041
4550.0	160.5	-64.2		277.3	553.1	732.8	35.1	1.000040
4600.0	156.7	-65.2		252.4	551.5	738.8	32.0	1.000039
4650.0	152.3	-65.5		254.7	551.0			1.000037

STATION ALTITUDE: 6010.40 FEET MSL
29 JUNE 84 0707 MDT
ASCENSION NO. 14

MANDATORY LEVELS
1810220016
W. 30

TABLE 16

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
650.0	5050.	21.0	14.4	57.	7.2	5.0	
670.0	5760.	18.5	12.0	55.	31.7	4.5	
700.0	6581.	15.3	3.6	43.	51.5	2.1	
730.0	70495.	13.0	-10.7	12.	30.5	15.7	
650.0	14510.	7.0	-8.6	30.	27.4	21.3	
600.0	14563.	1.7	-5.7	50.	20.7	21.4	
550.0	16944.	-3.0	-14.7	41.	25.0	22.3	
500.0	19412.	-5.1	-24.9	21.	79.1	16.2	
450.0	22096.	-10.7	-32.0	15.	112.7	10.5	
400.0	25037.	-15.3	-32.1	25.	123.7	5.5	
350.0	28277.	-21.5	-40.4	19.	148.7	7.5	
300.0	31015.	-29.0	-44.3	28.	131.0	22.2	
250.0	35053.	-42.3			322.4	31.2	
200.0	40377.	-55.1			305.6	32.4	
175.0	43645.	-60.3			311.4	35.0	
150.0	45745.	-65.4					

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
 31.15710 LAT DEG
 105.64511 LONG DEG

SIGNIFICANT LEVEL DATA
 1010070070
 JALLEN

TABLE 17

STATION ALTITUDE 4051.00 FEET MSL
 17 JUNE 84 0740 MDT
 ASCENSION NO. 74

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUMID. PERCENT
379.5	20.9	52.0
370.1	21.8	51.0
360.2	21.3	55.0
350.3	20.0	53.0
349.2	20.2	57.0
345.2	19.4	57.0
340.0	18.3	57.0
339.5	17.4	57.0
331.1	16.3	57.0
325.9	15.7	56.0
324.2	15.0	56.0
323.5	14.3	56.0
323.0	13.7	56.0
322.0	13.0	56.0
320.0	12.2	56.0
319.0	11.4	56.0
318.0	10.7	56.0
317.0	10.0	56.0
316.0	9.3	56.0
315.0	8.6	56.0
314.0	7.9	56.0
313.0	7.2	56.0
312.0	6.5	56.0
311.0	5.8	56.0
310.0	5.1	56.0
309.0	4.4	56.0
308.0	3.7	56.0
307.0	3.0	56.0
306.0	2.3	56.0
305.0	1.6	56.0
304.0	0.9	56.0
303.0	0.2	56.0
302.0	-0.5	56.0
301.0	-1.2	56.0
300.0	-1.9	56.0
299.0	-2.6	56.0
298.0	-3.3	56.0
297.0	-4.0	56.0
296.0	-4.7	56.0
295.0	-5.4	56.0
294.0	-6.1	56.0
293.0	-6.8	56.0
292.0	-7.5	56.0
291.0	-8.2	56.0
290.0	-8.9	56.0
289.0	-9.6	56.0
288.0	-10.3	56.0
287.0	-11.0	56.0
286.0	-11.7	56.0
285.0	-12.4	56.0
284.0	-13.1	56.0
283.0	-13.8	56.0
282.0	-14.5	56.0
281.0	-15.2	56.0
280.0	-15.9	56.0
279.0	-16.6	56.0
278.0	-17.3	56.0
277.0	-18.0	56.0
276.0	-18.7	56.0
275.0	-19.4	56.0
274.0	-20.1	56.0
273.0	-20.8	56.0
272.0	-21.5	56.0
271.0	-22.2	56.0
270.0	-22.9	56.0
269.0	-23.6	56.0
268.0	-24.3	56.0
267.0	-25.0	56.0
266.0	-25.7	56.0
265.0	-26.4	56.0
264.0	-27.1	56.0
263.0	-27.8	56.0
262.0	-28.5	56.0
261.0	-29.2	56.0
260.0	-29.9	56.0
259.0	-30.6	56.0
258.0	-31.3	56.0
257.0	-32.0	56.0
256.0	-32.7	56.0
255.0	-33.4	56.0
254.0	-34.1	56.0
253.0	-34.8	56.0
252.0	-35.5	56.0
251.0	-36.2	56.0
250.0	-36.9	56.0
249.0	-37.6	56.0
248.0	-38.3	56.0
247.0	-39.0	56.0
246.0	-39.7	56.0
245.0	-40.4	56.0
244.0	-41.1	56.0
243.0	-41.8	56.0
242.0	-42.5	56.0
241.0	-43.2	56.0
240.0	-43.9	56.0
239.0	-44.6	56.0
238.0	-45.3	56.0
237.0	-46.0	56.0
236.0	-46.7	56.0
235.0	-47.4	56.0
234.0	-48.1	56.0
233.0	-48.8	56.0
232.0	-49.5	56.0
231.0	-50.2	56.0
230.0	-50.9	56.0
229.0	-51.6	56.0
228.0	-52.3	56.0
227.0	-53.0	56.0
226.0	-53.7	56.0
225.0	-54.4	56.0
224.0	-55.1	56.0
223.0	-55.8	56.0
222.0	-56.5	56.0
221.0	-57.2	56.0
220.0	-57.9	56.0
219.0	-58.6	56.0
218.0	-59.3	56.0
217.0	-60.0	56.0
216.0	-60.7	56.0
215.0	-61.4	56.0
214.0	-62.1	56.0
213.0	-62.8	56.0
212.0	-63.5	56.0
211.0	-64.2	56.0
210.0	-64.9	56.0
209.0	-65.6	56.0
208.0	-66.3	56.0
207.0	-67.0	56.0
206.0	-67.7	56.0
205.0	-68.4	56.0
204.0	-69.1	56.0
203.0	-69.8	56.0
202.0	-70.5	56.0
201.0	-71.2	56.0
200.0	-71.9	56.0
199.0	-72.6	56.0
198.0	-73.3	56.0
197.0	-74.0	56.0
196.0	-74.7	56.0
195.0	-75.4	56.0
194.0	-76.1	56.0
193.0	-76.8	56.0
192.0	-77.5	56.0
191.0	-78.2	56.0
190.0	-78.9	56.0
189.0	-79.6	56.0
188.0	-80.3	56.0
187.0	-81.0	56.0
186.0	-81.7	56.0
185.0	-82.4	56.0
184.0	-83.1	56.0
183.0	-83.8	56.0
182.0	-84.5	56.0
181.0	-85.2	56.0
180.0	-85.9	56.0
179.0	-86.6	56.0
178.0	-87.3	56.0
177.0	-88.0	56.0
176.0	-88.7	56.0
175.0	-89.4	56.0
174.0	-90.1	56.0
173.0	-90.8	56.0
172.0	-91.5	56.0
171.0	-92.2	56.0
170.0	-92.9	56.0
169.0	-93.6	56.0
168.0	-94.3	56.0
167.0	-95.0	56.0
166.0	-95.7	56.0
165.0	-96.4	56.0
164.0	-97.1	56.0
163.0	-97.8	56.0
162.0	-98.5	56.0
161.0	-99.2	56.0
160.0	-99.9	56.0
159.0	-100.6	56.0
158.0	-101.3	56.0
157.0	-102.0	56.0
156.0	-102.7	56.0
155.0	-103.4	56.0
154.0	-104.1	56.0
153.0	-104.8	56.0
152.0	-105.5	56.0
151.0	-106.2	56.0
150.0	-106.9	56.0
149.0	-107.6	56.0
148.0	-108.3	56.0
147.0	-109.0	56.0
146.0	-109.7	56.0
145.0	-110.4	56.0
144.0	-111.1	56.0
143.0	-111.8	56.0
142.0	-112.5	56.0
141.0	-113.2	56.0
140.0	-113.9	56.0
139.0	-114.6	56.0
138.0	-115.3	56.0
137.0	-116.0	56.0
136.0	-116.7	56.0
135.0	-117.4	56.0
134.0	-118.1	56.0
133.0	-118.8	56.0
132.0	-119.5	56.0
131.0	-120.2	56.0
130.0	-120.9	56.0
129.0	-121.6	56.0
128.0	-122.3	56.0
127.0	-123.0	56.0
126.0	-123.7	56.0
125.0	-124.4	56.0
124.0	-125.1	56.0
123.0	-125.8	56.0
122.0	-126.5	56.0
121.0	-127.2	56.0
120.0	-127.9	56.0
119.0	-128.6	56.0
118.0	-129.3	56.0
117.0	-130.0	56.0
116.0	-130.7	56.0
115.0	-131.4	56.0
114.0	-132.1	56.0
113.0	-132.8	56.0
112.0	-133.5	56.0
111.0	-134.2	56.0
110.0	-134.9	56.0
109.0	-135.6	56.0
108.0	-136.3	56.0
107.0	-137.0	56.0
106.0	-137.7	56.0
105.0	-138.4	56.0
104.0	-139.1	56.0
103.0	-139.8	56.0
102.0	-140.5	56.0
101.0	-141.2	56.0
100.0	-141.9	56.0
99.0	-142.6	56.0
98.0	-143.3	56.0
97.0	-144.0	56.0
96.0	-144.7	56.0
95.0	-145.4	56.0
94.0	-146.1	56.0
93.0	-146.8	56.0
92.0	-147.5	56.0
91.0	-148.2	56.0
90.0	-148.9	56.0
89.0	-149.6	56.0
88.0	-150.3	56.0
87.0	-151.0	56.0
86.0	-151.7	56.0
85.0	-152.4	56.0
84.0	-153.1	56.0
83.0	-153.8	56.0
82.0	-154.5	56.0
81.0	-155.2	56.0
80.0	-155.9	56.0
79.0	-156.6	56.0
78.0	-157.3	56.0
77.0	-158.0	56.0
76.0	-158.7	56.0
75.0	-159.4	56.0
74.0	-160.1	56.0
73.0	-160.8	56.0
72.0	-161.5	56.0
71.0	-162.2	56.0
70.0	-162.9	56.0
69.0	-163.6	56.0
68.0	-164.3	56.0
67.0	-165.0	56.0
66.0	-165.7	56.0
65.0	-166.4	56.0
64.0	-167.1	56.0
63.0	-167.8	56.0
62.0	-168.5	56.0
61.0	-169.2	56.0
60.0	-169.9	56.0
59.0	-170.6	56.0
58.0	-171.3	56.0
57.0	-172.0	56.0
56.0	-172.7	56.0
55.0	-173.4	56.0
54.0	-174.1	56.0
53.0	-174.8	56.0
52.0	-175.5	56.0
51.0	-176.2	56.0
50.0	-176.9	56.0
49.0	-177.6	56.0
48.0	-178.3	56.0
47.0	-179.0	56.0
46.0	-179.7	56.0
45.0	-180.4	56.0
44.0	-181.1	56.0
43.0	-181.8	56.0
42.0	-182.5	56.0
41.0	-183.2	56.0
40.0	-183.9	56.0
39.0	-184.6	56.0
38.0	-185.3	56.0
37.0	-186.0	56.0
36.0	-186.7	56.0
35.0	-187.4	56.0
34.0	-188.1	56.0
33.0	-188.8	56.0
32.0	-189.5	56.0
31.0	-190.2	56.0
30.0	-190.9	56.0
29.0	-191.6	56.0
28.0	-192.3	56.0
27.0	-193.0	56.0
26.0	-193.7	56.0
25.0	-194.4	56.0
24.0	-195.1	56.0
23.0	-195.8	56.0
22.0	-196.5	56.0
21.0	-197.2	56.0
20.0	-197.9	56.0
19.0	-198.6	56.0
18.0	-199.3	56.0
17.0	-200.0	56.0
16.0	-200.7	56.0
15.0	-201.4	56.0
14.0	-202.1	56.0
13.0	-202.8	56.0
12.0	-203.5	56.0
11.0	-204.2	56.0
10.0	-204.9	56.0
9.0	-205.6	56.0
8.0	-206.3	56.0
7.0	-207.0	56.0
6.0	-207.7	56.0
5.0	-208.4	56.0
4.0	-209.1	56.0
3.0	-209.8	56.0
2.0	-210.5	56.0
1.0	-211.2	56.0
0.0	-211.9	56.0

STATION ALTITUDE 4051.0 FEET MSL
25 JUNE 84
ASCENSION NO. 79

UPPER AIR DATA
181000Z0079
JALLEN

STATION ALTITUDE 4051.0 FEET MSL
25 JUNE 84
ASCENSION NO. 79

0740 MDT

TABLE 18

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS DIGITS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DEFLECTION DEGREES(TN)	WIND DATA		INDEX OF REFRACTION
							DIR	SPEED	
4551.0	879.6	20.9	52.0	1025.2	570.3	40.0	4.1	1.000208	
4500.0	865.9	21.7	51.8	1015.2	571.3	32.5	3.8	1.000205	
4000.0	850.5	21.3	51.6	999.2	571.0	22.8	3.6	1.000203	
3500.0	836.0	20.0	58.7	986.3	559.5	12.7	3.5	1.000200	
3000.0	821.4	20.1	63.7	959.2	559.4	7.1	3.9	1.000202	
2500.0	807.1	20.2	59.4	952.3	659.4	10.3	5.0	1.000204	
2000.0	793.0	19.5	57.0	937.3	558.5	24.3	6.8	1.000205	
1500.0	779.0	18.2	57.5	924.1	555.9	28.3	9.4	1.000205	
1000.0	765.2	15.6	57.0	916.5	555.1	32.7	9.8	1.000207	
500.0	751.8	15.4	57.0	903.1	553.4	40.5	9.3	1.000203	
000.0	738.4	14.3	52.0	890.2	552.0	56.7	9.1	1.000205	
1000.0	725.2	13.5	42.2	877.9	550.8	75.0	17.2	1.000205	
1500.0	712.2	12.9	32.4	855.2	559.7	95.0	12.5	1.000205	
2000.0	699.4	12.1	23.2	852.5	558.6	95.0	15.2	1.000204	
2500.0	686.9	11.0	27.2	840.3	557.3	96.2	17.1	1.000202	
3000.0	674.3	9.6	31.1	828.4	556.1	96.2	18.7	1.000198	
3500.0	661.1	8.6	30.5	817.0	554.6	97.0	19.3	1.000193	
4000.0	648.0	7.3	27.5	806.1	552.9	97.0	19.5	1.000192	
4500.0	635.2	6.7	23.5	794.7	551.5	99.4	19.3	1.000191	
5000.0	622.2	5.4	20.4	783.5	550.0	100.6	20.2	1.000190	
5500.0	609.6	4.4	15.4	772.5	548.5	100.6	21.1	1.000182	
6000.0	597.5	3.6	12.2	761.7	547.1	99.0	21.5	1.000185	
6500.0	585.5	2.9	9.4	751.5	545.4	97.8	21.6	1.000183	
7000.0	573.9	2.1	6.0	741.4	543.6	97.4	21.6	1.000175	
7500.0	562.9	1.4	3.6	730.9	542.0	98.3	21.6	1.000170	
8000.0	552.1	0.8	1.6	719.6	541.0	98.3	21.5	1.000163	
8500.0	541.4	0.2	0.5	706.1	540.3	98.3	21.0	1.000159	
9000.0	530.8	-0.4	0.2	692.5	540.9	97.7	20.8	1.000155	
9500.0	520.4	-1.1	0.1	679.3	540.0	97.7	21.2	1.000153	
10000.0	510.1	-1.8	0.0	666.2	539.3	97.7	21.2	1.000151	
10500.0	500.0	-2.5	0.0	653.5	538.5	97.7	21.2	1.000145	
11000.0	490.0	-3.2	0.0	640.3	535.5	97.7	21.2	1.000143	
11500.0	480.0	-3.9	0.0	629.5	534.3	97.7	21.2	1.000143	
12000.0	470.0	-4.6	0.0	619.4	533.1	97.7	21.2	1.000143	
12500.0	460.0	-5.3	0.0	609.2	531.9	97.7	21.2	1.000143	
13000.0	450.0	-6.0	0.0	600.2	530.7	97.7	21.2	1.000143	
13500.0	440.0	-6.7	0.0	590.5	529.5	97.7	21.2	1.000143	
14000.0	430.0	-7.4	0.0	580.7	528.3	97.7	21.2	1.000143	
14500.0	420.0	-8.1	0.0	570.7	527.1	97.7	21.2	1.000143	
15000.0	410.0	-8.8	0.0	560.7	525.9	97.7	21.2	1.000143	
15500.0	400.0	-9.5	0.0	550.7	524.7	97.7	21.2	1.000143	
16000.0	390.0	-10.2	0.0	540.7	523.5	97.7	21.2	1.000143	
16500.0	380.0	-10.9	0.0	530.7	522.3	97.7	21.2	1.000143	
17000.0	370.0	-11.6	0.0	520.7	521.1	97.7	21.2	1.000143	
17500.0	360.0	-12.3	0.0	510.7	519.9	97.7	21.2	1.000143	
18000.0	350.0	-13.0	0.0	500.7	518.7	97.7	21.2	1.000143	
18500.0	340.0	-13.7	0.0	490.7	517.5	97.7	21.2	1.000143	
19000.0	330.0	-14.4	0.0	480.7	516.3	97.7	21.2	1.000143	
19500.0	320.0	-15.1	0.0	470.7	515.1	97.7	21.2	1.000143	
20000.0	310.0	-15.8	0.0	460.7	513.9	97.7	21.2	1.000143	
20500.0	300.0	-16.5	0.0	450.7	512.7	97.7	21.2	1.000143	
21000.0	290.0	-17.2	0.0	440.7	511.5	97.7	21.2	1.000143	
21500.0	280.0	-17.9	0.0	430.7	510.3	97.7	21.2	1.000143	
22000.0	270.0	-18.6	0.0	420.7	509.1	97.7	21.2	1.000143	
22500.0	260.0	-19.3	0.0	410.7	507.9	97.7	21.2	1.000143	
23000.0	250.0	-20.0	0.0	400.7	506.7	97.7	21.2	1.000143	
23500.0	240.0	-20.7	0.0	390.7	505.5	97.7	21.2	1.000143	
24000.0	230.0	-21.4	0.0	380.7	504.3	97.7	21.2	1.000143	
24500.0	220.0	-22.1	0.0	370.7	503.1	97.7	21.2	1.000143	
25000.0	210.0	-22.8	0.0	360.7	501.9	97.7	21.2	1.000143	
25500.0	200.0	-23.5	0.0	350.7	500.7	97.7	21.2	1.000143	
26000.0	190.0	-24.2	0.0	340.7	499.5	97.7	21.2	1.000143	
26500.0	180.0	-24.9	0.0	330.7	498.3	97.7	21.2	1.000143	
27000.0	170.0	-25.6	0.0	320.7	497.1	97.7	21.2	1.000143	
27500.0	160.0	-26.3	0.0	310.7	495.9	97.7	21.2	1.000143	
28000.0	150.0	-27.0	0.0	300.7	494.7	97.7	21.2	1.000143	
28500.0	140.0	-27.7	0.0	290.7	493.5	97.7	21.2	1.000143	
29000.0	130.0	-28.4	0.0	280.7	492.3	97.7	21.2	1.000143	
29500.0	120.0	-29.1	0.0	270.7	491.1	97.7	21.2	1.000143	
30000.0	110.0	-29.8	0.0	260.7	489.9	97.7	21.2	1.000143	
30500.0	100.0	-30.5	0.0	250.7	488.7	97.7	21.2	1.000143	
31000.0	90.0	-31.2	0.0	240.7	487.5	97.7	21.2	1.000143	
31500.0	80.0	-31.9	0.0	230.7	486.3	97.7	21.2	1.000143	
32000.0	70.0	-32.6	0.0	220.7	485.1	97.7	21.2	1.000143	
32500.0	60.0	-33.3	0.0	210.7	483.9	97.7	21.2	1.000143	
33000.0	50.0	-34.0	0.0	200.7	482.7	97.7	21.2	1.000143	
33500.0	40.0	-34.7	0.0	190.7	481.5	97.7	21.2	1.000143	
34000.0	30.0	-35.4	0.0	180.7	480.3	97.7	21.2	1.000143	
34500.0	20.0	-36.1	0.0	170.7	479.1	97.7	21.2	1.000143	
35000.0	10.0	-36.8	0.0	160.7	477.9	97.7	21.2	1.000143	
35500.0	0.0	-37.5	0.0	150.7	476.7	97.7	21.2	1.000143	

UPPER AIR DATA
101030070
JALLEN
STATION ALTITUDE 4051.0 FEET MSL
19 JUNE 64 0740 MDT
ASCENSION NO. 79

GEODETIC COORDINATES
33.16712 LAT DEG
106.42511 LON DEG

TABLE 18 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TD)	WIND SPEED KNOTS	INDEX OF REFRACTION
24000.0	416.6	-15.4	17.9	557.3	525.1	121.8	8.6	1.000122
24500.0	413.4	-15.4	18.4	556.1	523.7	127.2	9.2	1.000125
25000.0	410.3	-15.1	19.3	554.5	522.3	136.7	7.7	1.000123
25500.0	407.1	-14.3	19.2	552.1	520.7	145.6	5.4	1.000121
26000.0	404.1	-13.3	19.4	549.3	519.2	152.2	3.6	1.000119
26500.0	401.2	-12.9	19.3	546.5	517.5	159.3	2.6	1.000117
27000.0	398.3	-12.4	19.7	543.5	515.0	170.9	1.2	1.000115
27500.0	395.1	-12.0	19.9	540.7	512.4	176.9	.6	1.000114
28000.0	392.0	-11.6	19.7	537.8	510.3	182.1	3.1	1.000112
28500.0	388.9	-11.2	19.1	534.9	508.2	181.9	7.0	1.000109
29000.0	385.7	-10.8	18.4	532.0	506.2	188.7	11.7	1.000107
29500.0	382.1	-10.4	18.3	529.2	504.3	194.4	15.9	1.000105
30000.0	378.5	-10.0	18.1	526.3	502.3	200.7	13.0	1.000104
30500.0	375.0	-9.7	18.1	523.4	500.3	206.5	19.9	1.000102
31000.0	371.5	-9.3	19.1	520.5	498.3	215.2	23.7	1.000100
31500.0	368.0	-8.9	19.2	517.6	496.2	212.6	21.5	1.000099
32000.0	364.4	-8.5	20.0	514.7	494.1	211.7	23.0	1.000097
32500.0	360.8	-8.2	20.3	511.8	492.1	210.3	24.2	1.000095
33000.0	357.3	-7.8	20.7	508.9	490.1	208.7	23.8	1.000094
33500.0	353.7	-7.5	20.7	506.0	488.0	206.1	23.5	1.000092
34000.0	350.1	-7.1	20.9	503.1	486.1	203.2	24.0	1.000091
34500.0	346.5	-6.8	20.3	500.2	484.2	200.7	24.6	1.000089
35000.0	342.9	-6.4	19.3	497.3	482.2	197.2	26.8	1.000087
35500.0	339.3	-6.0	18.5	494.4	480.2	193.7	22.0	1.000085
36000.0	335.7	-5.7	18.5	491.5	478.2	190.2	22.0	1.000083
36500.0	332.1	-5.3	18.5	488.6	476.2	186.7	31.6	1.000081
37000.0	328.5	-4.9	18.5	485.7	474.1	183.2	37.7	1.000081
37500.0	324.9	-4.5	18.5	482.8	472.1	179.7	32.7	1.000080
38000.0	321.3	-4.2	18.5	479.9	470.0	176.2	32.4	1.000079
38500.0	317.7	-3.8	18.5	477.0	468.0	172.7	32.4	1.000077
39000.0	314.1	-3.4	18.5	474.1	466.0	169.2	32.6	1.000075
39500.0	310.5	-3.1	18.5	471.2	464.0	165.7	33.4	1.000073
40000.0	306.9	-2.7	18.5	468.3	462.0	162.2	34.8	1.000072
40500.0	303.3	-2.4	18.5	465.4	460.0	158.7	34.7	1.000071
41000.0	299.7	-2.0	18.5	462.5	458.0	155.2	38.9	1.000070
41500.0	296.1	-1.7	18.5	459.6	456.0	151.7	40.1	1.000069
42000.0	292.5	-1.3	18.5	456.7	454.0	148.2	41.1	1.000067
42500.0	288.9	-1.0	18.5	453.8	452.0	144.7	41.2	1.000065
43000.0	285.3	-.6	18.5	450.9	450.0	141.2	47.0	1.000063

.. AT LARGER ALTITUDES RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
19 JUL 54
ASCENSION NO. 75

UPPER AIR DATA
101703079
JALLEN

0740 MDT

GEODETIC COORDINATES
33.15712 LAT DEG
106.49511 LON DEG

TABLE 18 Cont'd

GEOMETRIC ALTITUDE FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIR-CTN DEGREES (TV)	SPEED KNOTS	
4450.0	171.5	-62.4		227.5	555.5	324.2	33.9	1.000043
4450.0	167.2	-63.5		277.9	564.3	328.2	37.5	1.000042
4500.0	163.3	-64.0		271.9	567.4	331.9	35.3	1.000041
4550.0	159.3	-64.7		266.1	562.5	336.5	31.9	1.000054
4600.0	155.4	-65.3		260.4	561.6	341.8	29.2	1.000053
4650.0	151.5	-66.0		254.9	560.7	347.5	27.2	1.000057
4700.0	147.8	-66.7		249.4	559.8	351.8	25.8	1.000055
4750.0	144.1	-67.4		244.0	558.9	355.7	24.4	1.000054
4800.0	140.5	-68.0		239.2	558.0	357.8	22.8	1.000053
4850.0	137.0	-68.4		234.3	557.5	359.8	19.9	1.000052
4900.0	133.5	-68.9		229.5	557.5	357.5	18.7	1.000051
4950.0	130.0	-69.4		224.7	557.5	354.0	18.3	1.000049
5000.0	126.5	-69.9		219.9	556.8	352.2	18.4	1.000048
5050.0	123.0	-70.3		215.2	556.0	351.1	18.7	1.000047
5100.0	119.7	-70.7		210.4	555.2	351.4	18.4	1.000045
5150.0	116.7	-71.2		205.6	554.3	352.4	17.9	1.000045
5200.0	114.7	-71.3		202.4	553.5	353.8	17.2	1.000044
5250.0	111.5	-71.7		197.5	552.7	354.5	15.4	1.000042
5300.0	109.0	-71.7		194.5	552.3	354.9	15.4	1.000041
5350.0	106.4	-71.7		191.5	552.2	355.0	14.2	1.000040
5400.0	103.5	-71.7		188.5	553.7	355.0	12.8	1.000040
5450.0	100.4	-71.7		185.0	555.4	355.0	17.1	1.000039
5500.0	98.4	-71.7		180.4	555.4	354.8	2.8	1.000037
5550.0	95.4	-71.7		176.4	555.4	353.2	10.0	1.000037
5600.0	92.5	-71.7		170.5	554.8	358.0	11.0	1.000035
5650.0	89.1	-71.7		164.9	554.2	4.6	12.5	1.000035
5700.0	86.0	-71.7		157.2	553.5	11.8	14.1	1.000034
5750.0	82.6	-71.7		149.3	553.3	19.1	15.7	1.000033
5800.0	79.2	-71.7		140.4	553.3	26.7	13.7	1.000032
5850.0	75.7	-71.7		130.4	556.7	37.1	25.0	1.000031
5900.0	72.2	-71.7		120.2	558.2	41.0	26.2	1.000030
5950.0	68.7	-71.7		109.1	561.2	55.2	23.6	1.000024
6000.0	65.2	-71.7		97.6	562.1			1.000024
6050.0	61.7	-71.7		86.1	562.1			1.000025
6100.0	58.2	-71.7		74.6	563.1			1.000027
6150.0	54.7	-71.7		63.1	564.0			1.000025

STATION ALTITUDE 4251.00 FEET MSL
 20 JUL 54
 ASCENSION NO. 75

MANUATION LEVELS
 1510000075
 JALLEN

GEODETIC COORDINATES
 33.15712 LAT DEG
 106.42511 LON DEG

TABLE 19

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5025.	21.3	14.5	55.	22.3	3.5	
800.0	5744.	20.2	11.6	57.	14.4	5.3	
750.0	6463.	15.2	5.0	57.	33.5	9.7	
700.0	7182.	12.2	-0.2	23.	39.7	12.4	
650.0	7901.	7.3	-11.0	23.	27.0	19.3	
600.0	8620.	1.7	-6.4	53.	100.2	21.2	
550.0	9339.	-2.2	-21.6	22.	20.3	21.5	
500.0	10058.	-5.1	-27.0	15.	32.2	20.2	
450.0	10777.	-11.4	-32.3	15.	105.5	9.2	
400.0	11496.	-13.1	-34.0	19.	136.8	7.7	
350.0	12215.	-15.6	-42.0	19.	320.8	4.7	
300.0	12934.	-17.7	-46.7	22.	114.9	2.5	
250.0	13653.	-43.7			334.2	20.2	
200.0	14372.	-45.2			320.1	15.4	
175.0	15191.	-45.5			321.2	19.4	
150.0	16010.	-45.7			340.5	25.5	
125.0	16829.	-69.2			351.5	18.5	
100.0	17648.	-69.5			355.2	9.5	
75.0	18467.	-67.7			47.2	25.3	
50.0	19286.	-63.2					

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

DATE
ILME